

Application No.: 10/014625

Case No.: 56937US002

Remarks

Claims 1-22 are pending.

Applicants gratefully acknowledge the Examiner's comments indicating that the 35 USC 112, second paragraph rejection of claim 21 and the 35 USC 103 rejection of claims 1-22 of Babu taken in view of Hansen et al. have been overcome. (Advisory Action mailed January 21, 2004, page 1.)

§ 103 Rejections

Claims 1-22 stand rejected under 35 USC § 103(a) as being unpatentable over Babu (US 5,112,882) in view of Davison (US 3,970,771).

Claim 1 provides a primer and claim 12 provides a tape comprising a primer. In both claims 1 and 12, the primer comprises: (a) a maleated thermoplastic elastomer comprising elastomer portions having a glass transition temperature; (b) a non-halogenated polyolefin; and (c) a resin that raises the glass transition temperature of the elastomer portions of the maleated thermoplastic elastomer.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references when combined must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. The initial burden is on the Patent Office to provide some suggestion of the desirability of doing what the inventor has done. (See M.P.E.P. 706.02(j).) Applicants respectfully submit that the Patent Office has failed to meet its burden for each of the three criteria.

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Suggestion or Motivation to Combine Reference Teachings

According to the Patent Office, Babu describes a primer consisting of a triblock copolymer of styrene-ethylene/butylene-styrene grafted with maleic anhydride mixed with an amorphous polypropylene. As acknowledged by the Patent Office, Babu does not teach a primer containing a resin in addition to a maleated thermoplastic elastomer and a non-halogenated polyolefin. (See, Paper No. 5, ¶ 3.)

The primer of Babu is complete by itself. However, the Patent Office asserts that one of ordinary skill in the art, motivated by an expectation of improved bonding properties in primer compositions having a higher overall glass transition temperature would incorporate the resins set forth in Davison into the primer composition of Babu. (Paper No. 5, ¶ 3, page 3.)

Applicants respectfully submit that the Patent Office has failed to provide a source for the proffered motivation to modify Babu. For example, Applicants respectfully submit that the Patent Office has failed to show how Babu describes, teaches, or suggests the desirability of adding any additional component to its primer. Nor has the Patent Office shown where either reference discusses the effects of glass transition temperature on primer performance. The Patent Office is invited either to withdraw the rejection, or to submit a reference or an affidavit under 37 CFR § 1.104(d)(2) to support the proposed modification of the cited references.

Assuming, *arguendo*, that proper motivation exists to modify the primer of Babu to create "primer compositions having a higher overall glass transition temperature," Applicants respectfully submit that raising the glass transition temperature of the elastomer portions of a composition is patentably distinct from raising the overall glass transition temperature of a composition, which might be accomplished by raising the glass transition temperature of the endblocks alone. Applicants respectfully submit that the Patent Office has failed to show how the references describe, teach, or suggest the addition of a resin that raises the glass transition temperature of the elastomer (i.e., midblock) portion of a thermoplastic elastomer. In fact, Davison explicitly teaches the desirability of resins that are compatible with the non-elastomeric (i.e., endblocks) of the copolymer. (See, e.g., Abstract; col. 1, lines 29-37; col. 2, lines 15-30; and col. 2, lines 53-57.) Thus, at best, one motivated to raise the overall glass transition temperature might turn to Davison for its description of endblock compatible resins in a block copolymer based primer.

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Reasonable Expectation of Success

In establishing a *prima facie* case of obviousness, the reasonable expectation of success must both be found in the prior art and not be based on applicant's disclosure. (See M.P.E.P. 706.02(j).)

First, the primer of the present invention requires a maleated thermoplastic elastomer (i.e., element (a)). (See, claims 1 and 12.) While Babu describes a copolymer grafted with maleic anhydride (Col. 8, lines 50-56), at best, Davison describes a block copolymer with blocks comprising principally hydrogenated blocks of a conjugated diene. (Col. 2, lines 4-5.) The Patent Office asserts that this is "a closely related primer composition having a functionalized elastomeric block copolymer as one of its components." (Paper No. 5, ¶ 3, page 3.) Applicants respectfully traverse, as Davison fails to describe, teach, or suggest maleated thermoplastic elastomers. Applicants further submit that the Patent Office has failed to show that the prior art describes, teaches, or suggests that resins that may be useful with the block copolymers of Davison would also be useful with the maleated copolymers of Babu.

Second, as discussed above, viewed as a whole, Davison teaches the desirability of endblock compatible resins and teaches away from resins compatible with the midblock (i.e., the elastomeric portion). Thus, Applicants respectfully submit that the Patent Office has failed to show how the references themselves provide one of ordinary skill in the art with the reasonable expectation that combining a midblock compatible resin with the primer of Babu would result in a successful primer.

In the Advisory Action dated January 21, 2004, the Patent Office asserts that Davison teaches "olefinic hydrocarbon resins" as being suitable, while Applicants' specification teaches that suitable resins may be hydrocarbon resins. (Page 2, ¶ 1.) Applicants note that the present invention requires a non-halogenated polyolefin, i.e., element (b) in addition to element (c). (See, claims 1 and 2.) Also, the primer of Babu already includes amorphous polyolefin. (Col. 8, lines 55-56.) Applicants respectfully submit the Patent Office has failed to show how the references describe, teach, or suggest that the addition of the olefinic hydrocarbon resin of Davison to the primer of Babu, which itself already contains an olefinic hydrocarbon resin, i.e., amorphous polypropylene would result in a successful primer.

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The Patent Office also asserts that the statement in Davison that the resins are "largely incompatible with the hydrogenated diene blocks" (i.e., the elastomeric midblocks) does not mean that the resin would not raise the glass transition temperature of the midblocks. (Advisory Action mailed January 21, 2004, page 2, ¶ 1.) First, Applicants respectfully submit that the Patent Office has failed to show that any resin of Davison is in fact compatible with the midblock portion of a maleated thermoplastic elastomer. Second, the Patent Office has failed to show that such a resin would raise the Tg of the midblock portion, as required by the present invention.

Furthermore, assuming, *arguendo*, that a resin described by Davison would raise the Tg of the midblock portion, the mere fact that references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (MPEP 2143.01.) Applicants respectfully submit, that the Patent Office has failed to show how the references describe, teach, or suggest the desirability of selecting such a resin from those described in Davison particularly since Davison teaches away from midblock compatible resins, teaching instead the desirability of endblock compatible resins. (See, e.g., Abstract; col. 1, lines 29-37; col. 2, lines 15-30; and col. 2, lines 53-57)

In summary, Applicants respectfully submit that the Patent Office has failed to show that Davison describes, teaches, or suggests a resin capable of raising the glass transition temperature of the midblock of a maleated thermoplastic elastomer. Nor has the Patent Office shown how the references themselves, or the knowledge of one of ordinary skill in the art would motivate one to select a resin capable of raising the midblock Tg from Davison (if one exists) and to combine it with the primer of Babu.

Teaching or Suggesting All Claim Limitations

The primer of the present invention requires three elements:

- (a) a maleated thermoplastic elastomer comprising elastomer portions having a glass transition temperature;
- (b) a non-halogenated polyolefin; and
- (c) a resin that raises the glass transition temperature of the elastomer portions of the maleated thermoplastic elastomer. (See claims 1 and 12.)

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As acknowledged by the Patent Office, Babu lacks the teaching of a suitable resin (i.e., element (c)). The Patent Office relies on Davison to provide the missing element. (Paper No. 5, ¶ 3, page 3.) However, the Patent Office has failed to show that any of the resins of Davison would raise the glass transition temperature of the elastomer portions of a maleated thermoplastic elastomer. Thus, even if Davison and Babu were combined as suggested, the Patent Office has failed to show that the resulting combination would teach all elements of the claimed invention.

In summary, the rejection of claims 1 and 12 under 35 USC § 103(a) as being unpatentable over Babu (US 5,112,882) in view of Davison (US 3,970,771) is unwarranted and should be withdrawn.

Claims 2-11 each depend from and add additional features to claim 1. Claim 1 is patentable for at least the reasons given above. Thus, claims 2-11 are likewise patentable. Claims 13-22 each depend from and add additional features to claim 12. Claim 12 is patentable for at least the reasons given above. Thus, claims 13-22 are likewise patentable.

In summary, the rejection of claims 1-22 under 35 USC § 103(a) as being unpatentable over Babu (US 5,112,882) in view of Davison (US 3,970,771) is unwarranted and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Allowance of claims 1-22 at an early date is solicited.

Respectfully submitted,

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Date

By: Colene H. Blank

Colene H. Blank, Reg. No.: 41,056
Telephone No.: (651) 737-2356

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

CHB/TMS/spg